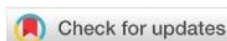


In House Training (IHT) Increasing Teacher Competencies in Building Literacy and Numeration Learning Strategies

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Abstract

Literacy scores in the Curug District Public Elementary School Cluster are still relatively low. Therefore, the service team carried out service with the aim of increasing teacher competence in literacy and numeracy learning in the Curug District Public Elementary School Cluster environment. In House Training activity is a form of Community Service carried out by Esa Unggul University PGSD Lecturers for Dirgantara Elementary School teachers in the Legok District Cluster area, Tangerang Regency. This activity was carried out as an effort to provide knowledge (insight) and increase teacher competence in developing literacy and numeracy-based learning strategies, so that they can be implemented in schools in the learning process. This activity will be held on September 25 and October 27 2023 in the Dirgantara Elementary School classroom, Legok District. The material presented is in the form of material exposure, simulations and practices carried out by IHT participants. This Community Service activity is a collaboration between lecturers and students of the Primary School Teacher Education Study Program (PGSD) at Esa Unggul University and the management of SDN Dirgantara. As a result of this activity, teachers have the ability to improve literacy and numeracy learning in schools. Therefore, it is concluded that the service activities carried out were successful in achieving the objectives.

A. Introduction

Literacy ability is an indicator of a nation's progress. Since 2000, Indonesia has participated in measuring students' literacy skills in three aspects, namely reading comprehension ability, numeracy ability and scientific literacy ability. Literacy skills are one of the prerequisites for today's education, the urgency of which cannot be avoided, moreover, literacy skills become capital for anyone, as they develop. The definition of literacy itself is an individual's ability to think critically, creatively, collaboratively to solve problems (Hidayah et al., 2023). Literacy is also said to be the ability to understand, write and read (Barus et al., 2021).

In the 21st century, the world is entering the era of industrial revolution 4.0. The development of the 21st century world is marked by the use of Information and Communication Technology (ICT) in all aspects of life (Al-Rahmi et al., 2020; Lim et al., 2020; Sayaf et al., 2021). In 21st century education, literacy skills are closely related to the demands of skills to understand information analytically, critically and reflectively. For this reason, it is necessary to implement literacy learning in every subject.

The quality of education in a country plays an important role in the progress that will be obtained. There are three assessment processes at the international level which can serve as references as well as indicators of the quality of education in a country, namely; TIMSS (Trends in International Mathematics and Science Study) is an international study for grades IV and VIII in the fields of Mathematics and Science which is

held every four years (Alharbi et al., 2020; Balfaqeeh et al., 2022; Wardat et al., 2022), PIRLS (Progress in International Reading Literacy Study) is a reading ability survey designed to find out the ability of elementary school children to understand various reading materials by involving children in the reading process (CM Chen et al., 2020; J. Chen et al., 2021; Wang & Liu, 2021), and PISA (Program for International Student Assessment) aims to periodically research the abilities of 15 year old students in reading, mathematics and science (Almarashdi & Jarrah, 2023; Radišić et al., 2021; You et al., 2021).

Facts about the low interest in reading among Indonesian people as per the results of PISA (Program for International Student Assessment) in 2023. PISA is an international assessment related to mathematics, reading and science abilities designed by the Organization for Economic Cooperation and Development (OECD). The PISA results announced on December 5 2023 stated that globally, the mathematics, reading and science scores of 15 years old students in 81 countries had fallen, including Indonesia.

The results of research conducted by PISA (Program for International Student Assessment) 2022 show that in reading ability, Indonesia received a score of 359, 117 different from the global average of 476 and down 12 points from before. Furthermore, in the Mathematics subject, Indonesia's average score fell 13 points to 366 from the previous 379. This figure is 106 points behind the global average. Meanwhile, the science ability score decreased by 13 points from before. PISA 2022, Indonesia obtained an average of 383 points, 102 points shy of the global average.

From the results of this research, it can be concluded that the low ability of our students in literacy, mathematics and science competencies is relatively low compared to other countries. The low level of these skills proves that the educational process has not developed students' knowledge competencies and interests. The low SCORE results of the PISA (Program for International Student Assessment) study caused the Indonesian Government to make changes to the regulations for the education evaluation system in Indonesia.

Currently, literacy and numeracy are the main components of the Minimum Competency Assessment (AKM) as a replacement for the National Examination (UN) starting in 2021 (Kantun et al., 2021). In the Ministry of Education and Culture (2021:3) AKM students' abilities are measured through the ability to use language reasoning (literacy) and the ability to reason using mathematics (numeracy) (Kusuma & Nurmawanti, 2023). This is stated in PERMENDIKBUD Ristek No. 17 of 2021 concerning National Assessments and Minimum Competency Assessments (AKM).

AKM is an assessment that measures the minimum abilities required by students (Lestari & Ratnaningsih, 2022). Meanwhile, numeracy is the ability to analyze, using numbers to translate them into the real context of everyday life. Basic literacy skills are something that students must master in order to adapt in the 21st century.

Erlyana (2023) stated that numeracy literacy is a skill in applying number concepts and arithmetic operations in solving contextual problems. Implementing literacy and numeracy in elementary schools is an important effort for students in facing challenges in the global era (Rohim, 2023). Pane et al. (2023) stated that literacy and numeracy are two important competencies, especially for children who are still in elementary school

One of the strategies in order to build a culture of literacy in the education sector, the Government launched the School Literacy Movement (GLS) program as part of the implementation of Minister of Education and Culture Regulation No. 23 of 2015 concerning the Development of Good Character (Karolus & Keban, 2023). The school literacy movement is a movement to increase students' interest in reading and improve students' reading skills (Kartikasari, 2022). Soleha (2022) stated that to realize the school Literacy Movement, a collaborative pattern is needed from various school members (students, teachers, principals, parents), academics, society, mass media and stakeholders. Therefore, a culture of literacy is needed in students so that they can improve critical thinking. With a literacy culture, students will be faced with the problems they will encounter in society.

B. Research Methods

The method for implementing Community Service is carried out in the form of lectures, questions and answers and discussions, accompanied by simulations and assignments to each teacher to implement the material presented by the resource persons. In House Training (IHT) was attended by 20 teachers in the Legok District area, Tangerang Regency. Activities will be held on September 25 and October 27 2023 at SD Negeri Dirgantara, PLP Curug Complex, Tangerang Regency. Presentation materials were created as

an effort to increase knowledge and train teachers about the importance of literacy and numeracy competencies and the learning strategies that will be implemented. After the activity is complete, participants are given a questionnaire by Googleform to obtain participant feedback on the activity. To increase teacher competence in developing literacy and numeracy learning strategies, it can be seen from the learning media products produced. From this IHT activity, it is hoped that teachers can increase knowledge, train and develop Literacy and Numeracy competencies, as well as the obstacles they face.

C. Results and Discussion

Community Service Implementation activities were carried out face to face at Dirgantara Elementary School, attended by teachers from the Legok sub-district cluster. The first session discussed the concept of numeracy literacy, the foundation of the School Literacy Movement (GLS) and obstacles to literacy implementation. The second session, regarding Numeracy, implementation of numeracy skills, strategies and obstacles to Numeracy in schools.

Following are the details of the activities

1. The first resource person, Dr Muhammad Soleh Hapudin, M.Sc
The first resource person delivered material regarding Literacy
2. The second resource person was Dr Mujazi, SKM, M.Pd
The second resource person gave an explanation about Numeracy



Figure 1. Activity Documentation

Based on the results of discussions with the teacher council participating in In House Training (IHT) at the school where they teach, literacy and numeracy are still in the low value category. The cause of the low literacy and numeracy scores in schools is due to the geographical conditions of the community, especially in terms of minimal parental education and inadequate infrastructure. Even though in terms of the learning process, varied learning strategies have been implemented, this has not been able to increase literacy and numeracy scores in schools.

The interviewees were of the view that to improve literacy and numeracy competencies there are several things that can be done. First, increasing access to literacy and numeracy learning resources such as books and libraries. Second, efforts to increase literacy and numeracy are by involving parents and the community by carrying out dissemination discussing the urgency of literacy and numeracy. Third, provide encouragement to students to actively participate in literacy and numeracy activities. Fourth, schools provide quality literacy materials and resources.

Community Service Activities in the form of In House Training (IHT) are able to increase teacher competence in developing literacy and numeracy learning strategies. This is proven by the delivery of products in the form of learning media by the teachers involved as In House Training (IHT) participants. For future service activities, it is necessary to strengthen the competence of technology-based learning teachers.

D. Conclusion

Community Service activities are carried out in the form of In House Training (IHT) to increase teacher competence in developing literacy and numeracy learning strategies. The result of this activity is an increase in teacher enthusiasm and knowledge which has the impact of finding learning innovations so that it can

improve the results of literacy and numeracy assessment scores.

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